ANTIFIBROSIS THERAPY IN THE MANAGEMENT OF PULMONARY TUBERCULOSIS

L. W. Osburn, M.B., B.Ch. (Rand); T. C. M. Herckenrath, Med. Drs. Arts. (Utrecht); and G. Spence-Smyth, M.D., F.R.C.P. (Irel.), F.R.C.O.G., F.C.P.S. & G. (S.A.)

Montebello Mission Hospital, Natal

A not uncommon occurrence during the treatment of pulmonary tuberculosis is the onset of pulmonary fibrosis with a residual cavity showing no evidence of closure. Rather, the cavity wall becomes denser as the surrounding fibrosing process continues. The end result of treatment in such a case is often a patient who, despite being reasonably well, is chronically sputum-positive. For a variety of reasons resection of the cavity may be contraindicated.

Although the range of anti-tuberculosis drugs appears formidable in theory, the fact of the matter is that patients who do not respond satisfactorily to the basic INH, PAS and streptomycin, rarely show permanent dramatic response to other drugs.

In our opinion a greater certainty regarding the management and prognosis of pulmonary tuberculosis would be possible if fibrosis could be controlled, and the vascularity of the area of the lesion improved. This implies controlling fibrosis by means of systemic antifibrosis therapy.

Material and Method

One of us had initiated trials of such a nature a year ago using a certain drug, but the response obtained was

TABLE I. CLINICAL FINDINGS BEFORE AND AFTER TREATMENT WITH POTABA

		Patients				
		1	*2*	*3*	*4*	*5*
Prior treatment with tuberculostatics (months)		7	4	3	10*	13*
Chest pain (subjective)	Before	—	+ (sharp)	+	+	+
	After	—	—	—	—	—
Cough (objective)	Before	++	+	++	++	++
	After	slight	—	slight	—	slight
Sputum (objective)	Before	++ purulent yellow	+ thick bloodstained	++ frothy white	++ thick white	+ thick bloodstained
	After	+ thin white	—	+ frothy white	—	—
Tightness of chest (subjective)	Before	—	—	++	+	+
	After	—	—	—	—	—
Dyspnoea at rest (subjective and objective)	Before	—	—	++	—	+
	After	—	—	—	—	—

* These two patients were transferred to Montebello from other institutions.

TABLE II. RADIOLOGICAL FINDINGS AFTER POTABA TREATMENT

	Patients				
	1	*2*	*3*	*4*	*5*
Location of disease	Bilateral	Bilateral	Bilateral	Bilateral	Unilateral
Type of cavitation	Unilateral, single	Bilateral, multiple	Bilateral, multiple	Unilateral, single	Unilateral, multiple
Cavity wall	Less dense	Not apparent as such	Less dense	Not apparent as such	Less dense
Cavity closure	Occurring	Apparently closed	Almost closed	Apparently closed	Occurring
Clearing of surrounding densities	Fair	Only a few linear densities remain	Fair	Only a few linear densities remain	Fair

TABLE III. BACTERIOLOGICAL FINDINGS BEFORE AND AFTER POTABA TREATMENT

		Patients				
		1	*2*	*3*	*4*	*5*
Sputum—Ziehl-Neelsen direct smear	Before	+	+	+	+	+
	After	+	—	—	—	—

equivocal. We now report on the use of potassium p-amino-benzoate Glenwood ('potaba'), described as a systemic antifibrosis agent of use in the management of scleroderma, pemphigus, Dupuytren's contracture, Peyronie's disease and pulmonary fibrosis.

Potaba was administered to 5 patients suffering from pulmonary tuberculosis for 6 weeks in a dose of 12 G. daily, divided into 3 G. (the contents of one sachet) 4 times a day, dissolved in cold water.

The results are given in Tables I, II and III.

In addition, potaba was given to 1 male and 1 female patient suffering from advanced tuberculosis with completely destroyed left lungs. For the first time in their clinical records they both gave a sputum-negative result following potaba therapy superimposed upon the tuberculostatics.

DISCUSSION

1. We are reasonably satisfied that the 5 patients we treated showed an unexpectedly favourable response both clinically and radiologically, when potassium p-amino-benzoate Glenwood (potaba) was added to their basic anti-tuberculosis therapy.

2. It is impossible to undertake proper trials of sufficient size with statistical control at our hospital.

3. We consider these results to be of sufficient significance in tuberculosis treatment to warrant well-planned trials by those in a position to carry them out.

4. If the value of potaba can be established beyond all doubt, then we feel that its real importance will almost certainly lie in its use from the very beginning of anti-tuberculosis therapy, or at least at a much earlier stage of the disease than in the trials conducted by us.

We wish to thank Messrs Protea Pan-Africa Pharmaceuticals, who made supplies of potaba available for these tests.